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AESTRACT

THE ENVIRONMENTAL NEEDS AND PROBLEMS OF THE PHYSICALLY HANCICAPPED ARE DISCUSSED, WITH PARTICULAR CONCERN FOR ARCHITECTURAL EARRIERS IN PRESENT AND FUTURE PUBLIC BUILDINGS. DIALOGUE REVEALS THE ESTABLISHMENT OF STANDARDS AND CONSTRAINTS OF WHICH THE PUBLIC MUST BECCME AWARE. OVERVIEWED WITH EMPHASIS ARE TOILET FACILITIES, RECREATIONAL AND CULTURAL FACILITIES. (TG)



Architectural Barrier Program of the National Society for Crippled Children and Adults

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The Easter Seal Research Foundation is a separate organization and it is completely independent of the National Society for Crippled Children and Adults of which I am a staff member. This session it seems to me that we have been talking about what I call the vicious circle of the problem of the handicapped individual. Mr. Goldsmith referred to three problems—the vicious circle—and I added a fourth, because this fourth problem is really what we are talking about, the environmental problem. The handicapped person has the social problem, the psychological problem, and the economical problem.

We have done many things in this country in the past, particularly since World War II, towards the other three problems. Only in recent years has there been any really great intention, outside the University of Illinois, which started the program right after World War II, of doing something about the environmental problem of the handicapped individual. Just where do you start to attack the environmental problem? You can start with housing; you can start with transportation; you can start with schools; you can start anywhere. You have to start some place, and this is what the National Society did four years ago in launching the program on architectural barriers.

This program is mainly an educational program trying to convince people that the buildings that are being built and have been built in the past have needless barriers that prohibit OFFICE OF SOUCATION

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their use by the handicapped. This is where we started out. We also started out doing the whole research project by interviewing a hundred handicapped people at Camp Wabbey, in Wisconsin. We came to many of the same conclusions in this little study of 100 interviews. We were planning to do them all over the country, but we gave out when we found similar results to those Goldsmith found in England, that the social, economical, and psychological problems of the handicapped were so great that most of them couldn't really even consider moving out of their own little protected womb, their home, because of the other problems they Barriers were not a problem, because they didn't move around, and they had no environment except maybe four walls or one house. Their "vision" was not that great. The opportunities that were presented to them, making reference to earlier remarks about opportunities, were not there; and so they were not concerned, because a person does not become concerned with what he knows he cannot do.

I dislike the terms "abled and disabled," and I dislike the terms "normal and abnormal." We all like to think of ourselves as being normal; we all like to think of ourselves as being able.

As this program of architectural barriers expanded throughout the country, we became aware of something else. It wasn't
cudden, I shouldn't say that; but the realization was sudden,
possibly, that we weren't talking about people that you usually
define as being disabled, we were really talking about people
with limited mobility. And how many people are in this group?
is it the small group who are in the wheel chairs? These are the



people with the most limited mobility in most cases, and I say, in most cases. These are the ones that seem to get the focus of the attention. But I would like to try a little experiment. We are talking about these studies at this conference, and I would like to do a little study of this group right here. May I be a psychologist for a minute? I would like to have people stand if they have anyone in their family or themselves—their immediate family or themselves, who has had a temporary disability. In other words, have you sprained your leg, broken your leg, been on crutches, used a cane, anytime temporarily disabled where you were not able to move about as you normally would? Would you please stand and remain standing? (The majority of the people present stood up.)

Now, this group has been temporarily disabled at one time or another in their lives. Will you please remain standing, since I haven't finished yet. All of you will be standing before this is over. Now, how many of you have someone in your family or yourselves who uses an orthopedic device, an artificial leg, crutches, wheel chairs, braces, and so on and so forth? How many of you or someone in your family has a heart condition or circulatory condition that limits their mobility—which makes them unable to walk up a full flight of steps? How many of you have someone in your family who is aged or unable because of their aged condition to walk up and down the steps safely? (Laughter) How many of you wear bifocals or trifocals, so when you approach a flight of steps your vision is distorted—very distorted? And if anyone is still remaining sitting, how many of you have ever



had a pregnant woman in your family? (Laughter)

TAYLOR: If anyone who didn't stand up will just stay around through the winter skiing season here, you soon will be.

FEARN: As it so happens, I qualify under many of those accounts. But the point I am making is that the person with limited mobility is not just the person we generally consider to be handicapped. When we are talking about architectural barriers, we are talking about the environment of all people; we are talking about making buildings usable and more safe for all people.

There are several things I would like to point out here. One is a quote attributed to the American Institute of Architects—I know Ben Evans is here—and if it isn't really their quote, I would like to find out the original source, because everyone has been using it from President Johnson down. "As much building, in terms of square footage, will be built between now and the year of 2,000 as has been built since Columbus discovered America." This is almost a frightening sort of prediction. The other statement is by Dr. Rusk, who is of the New York Institute on Rehabilitation. "By 1980 there will be one handicapped person, in the usual definition of the term handicapped, or one person with a chronic illness, or one person over the age of 65, for every able bodied person in the population." This is also a little bit frightening.

With this as a background, I would like to go into some of the research that we did on existing buildings. Already the survey that was made in Rochester, New York, has been mentioned. This was part of our project in Rochester. We did 5,000 surveys



in all parts of the country and in all different sizes of communities. I will only give you the preliminary findings, as we have been in the process of writing these up for some time. And they will be available probably in the fall.

In the survey of the 5,000 buildings of twelve different building classifications (private homes being the only major classification of buildings that was not included), we found these preliminary findings: That the toilet facilities are the most impossible. This agrees with Selwyn's statements. In all classifications, only a few acceptable toilet facilities were found in any of the buildings--and this includes hospitals. Outside of your rehabilitation departments, which are usually open from 9:00 to 5:00 or 8:00 to 5:00 or something like this, they do not have acceptable toilets. If you go on the floor of any hospital and ask a nurse about trying to transfer people from a wheel chair to some of the toilet facilities that are on the nursing floors, it is their biggest gripe, their biggest problem--space and otherwise. I was very glad to see that Kira was here from Cornell University. We are very pleased that finally the bathroom is getting some attention from everyone, and not just for the handicapped. But this has been a real problem and the problem of the bathroom is universal. There are very few bathrooms in the United States that are adequate--and I am certain Kira would say for everyone that they are not only unsafe, they are in many cases unusable. These really limit the person we are talking about, in the popular use of the term, the disabled.



The other thing we found is that the cultural and recreational buildings have the most barriers. In other words, your libraries, your museums, your theaters, the buildings with the most barriers are those that we usually think of when we say "if the handicapped person can't work, at least he has the advantage of having time to make use of the recreational and cultural opportunities in the community." We find that these are the exact buildings that have the most barriers. buildings that have the least barriers, and I am certain there is a financial implication to this, are the retail stores. They are the most acceptable buildings in the United States, and it is obvious as to why. The whole move toward shopping centers is an economic thing. The shopping centers are the most acceptable to everyone. They have parking facilities so the handicapped person, if he is able to get out of his home and if he is able to drive to a shopping center, he is then able to function fairly normally within that environment. With this financial impetus, the shopping centers are very accessible. And they don't just make them for the handicapped person; they want everything accessible to everyone. They make it easier for you to get to their stores to sell to you.

This is basically the preliminary findings we have found in the past five years. As I mentioned, this is merely an educational program, and Mr. Gelwicks is the local chairman of our committee in San Francisco. We have state and local committees all over the United States. In the past five years, 25 states have adopted legislation which makes the use of the



American Standard Association specifications mandatory or permissive in buildings built with public funds. This is the first reference here, by the way, to the American Standard Association's specifications for making buildings accessible to and usable by the physically handicapped. Tim Nugent was the secretary of the exceptional committee which developed these standards, and I will leave it to him to go into the details. But these are and have been developed. They are applicable to many different types of buildings, and they are certainly the basis for making buildings much more acceptable.

We have available for distribution an article on hospitals, which was in the Journal of American Hospitals, plus an article which was in the Journal of American Insurance, which gives some of the insurance implications of removing architectural barriers. Suffice it to say, if you remove architectural barriers, you make the building safer, your liability claims go down, and then your insurance rates go down. There are many other implications to the insurance industry as well. We also have a supply of the American Standard Association, so anyone interested may have a copy. Mr. Gelwicks mentioned the Architectural Barriers

Commission of the Federal Government, which is in the Department of Health, Education, and Welfare. The Architectural Barriers

Commission is not limited, nor is the National Society project particularly limited to the buildings alone.

At the very outset of the project, our co-sponsors, the President's Committee for the Employment of the Handicapped, worked with the scheduled airlines in redeveloping or restating



their policy on caring for handicapped people on the scheduled airlines. Consequently, it is now possible for many additional groups of handicapped people to travel on airlines. A wheel chair person is permitted to travel by himself on airlines, among other things. The San Francisco Bay Area is now planning a rapid transit system. Work is being done to make this acceptable to the handicapped. In Washington, D. C., where Congress is their local government, they have a bill which has passed the United States Congress that requires that consideration be given to the handicapped in the design of their rapid transit system—of their subway system for the D. C. area. So the concern has not been just in buildings, per se, but also in other areas of our environment.

The Commission is also concerned about housing. And there was a meeting in Washington of consultants in April. I would have guessed we would have been called to the Architectural Barriers Commission. Tim Nugent and I both attended that. But there were also representatives at that session of the Public Housing authorities—the Federal Public Housing authorities. They have changed their regulations so that in housing for the elderly they have included somehow or other in the definition of eiderly—that you could be included at 21 if you are disabled and can thereby qualify for some of the units for the elderly. In other words, the Federal Government is expanding their public housing program to include the handicapped. So there is scope beyond just the buildings themselves, and the



Commission is involved in this activity.

The Commission will have the first meeting on June 9, 1966, and it is too early to predict exactly what is going to come out of this Commission. Among other things, getting back to Goldsmith's report, I think we are going to have more regulations; we are going to have more criteria which will have to be met in order to qualify for Federal funds, for Hill-Burton funds for hospitals, for educational funds for educational institutions, and for other types by the Federal Government, as a result of the work of this Commission. I will leave it to Tim Nugent to cover anything on costs, but I think basically what I have to say is that the day of designing buildings for the average man, if there is an average man, will very soon be over. The day has come, and I am certain that many buildings are now being built that will testify to this, that we are building for not the non-man, but for the man that is living in the United States, and that includes for all different types of people--a wide range. traditional things that we have done in the past are going to have to be put by the board. Instead, we are going to have †o design for architectural opportunities for everyone.

GOOD: I can give you an example that I am working with right at this particular time in terms of barriers for handicapped people. I am designing a house for a MS patient. One of the problems of this patient is bathing. It is almost impossible to use the standard fixtures that are provided by the manufacturers of the plumbing industry. This man at the



present time is able to take a shower in a wheel chair, but of course, the standard shower stalls wouldn't begin to accept this chair; and the standard floor arrangements are not adequate. It is expected that his disease may progress and he won't be able to take a shower, so that he will have to take baths in the bathtub. But the bathtubs are not at all suitable, because there is no way of getting him into the bathtub. So you have to take a standard bathtub and raise it 10 inches off the floor and put an unsanitary hole into the bathtub, so you can slip the sling of the equipment that lifts him—you must put it under there and lift him into the bathtub. But it is a very awkward thing. And that's just another example of the bathroom again causing trouble. Do you have any suggestions about this?

NUGENT: Some of the suggestions for that will come up in the slides! have to snow; even though I had to edit some of the slides, I think they will cover this. I will probably repeat myself, so much of this is based on assumptions through disassociation. And any assumption, particularly in behavioral science where you are talking about the potential of the individual, that is based on a lack of association with that individual, is almost invariably going to be a false assumption. And this is where the reciprocity I will talk about later comes in.

FEARN: I think Kira's study at Cornell University points out the inadequacies for everyone of the bathtub--in fact the whole bathroom. We have not really done any research that has



resulted in design changes. But I don't think any of these problems cannot be met by the designers, if they go out and do the necessary research. I think we might be getting past our Victorian reservations about talking about the bathroom. We have the changed the bathroom since the Victorian days.

of the American Standards: "Toilet rooms will have at least one toilet facility three feet wide . . ." Architects ought to be warned on this. There ought to be a note in here indicating that, in fact, toilet facilities of that size are not large enough to accommodate either a wheel chair or an attendant.

NUGENT: I will answer that later on, too, but I would like to emphasize that the American Standards do not try to propose the <u>ideal</u>. They propose the minimum that would make something possible or workable. They do not preclude the individual architect or the designer of the building from doing more than that. And certain premises must be established in the development of standards. It is wrong to assume that this is the end goal; no one has ever said it was an end goal. It is the beginning goal.

TAYLOR: I worry when things get into print; they tend to become accepted as sacred; but people like Goldsmith work to prevent that from occurring. He has marked up the "standards" sheet and written marginal notes all around it. This shows that he is thinking beyond the printed page. I give my students special credit for this. (Laughter)



GOLDSMITH: From this view point, the minimum standard should be large enough to accommodate a wheel chair and an attendant.

C: I want to comment on the sacredness of the printed page. As soon as a minimum standard is put out, it becomes the maximum, and no one wants to go beyond it. Why, I don't know. We ought to take this into consideration in writing these standards—we should state each one carefully to avoid this.

TAYLOR: We may have to communicate this into a standard in ways we haven't yet succeeded in communicating, including in the instructions for using the standards. Maybe we need to print some discussions, such as we have here, to warn the user bluntly on the above points.

FEARN: I agree with you 100 per cent, but I think the problem in the United States in developing minimum standards is that we try to reach some sort of an agreement, and this is the way the American Standards Association operates. This is probably one of the weaknesses that we have in any of our building codes, for example. They are on the same basis. No matter which standard you are talking about, we have the same problem. This might be something tested by the psychologists as to why people, when they are reading, including architects, when they are reading different regulations which are minimal, why they distort and accept this as really the maximum. It may be a very interesting work.

C: Goldsmith mentioned the possible damage to the handicapped child of introducing him or trying to introduce him into a normal school schedule. This is something that interests me



very much, because we are presently thinking of experimenting with this. I am sure that there is a trend in that direction. I wondered if there have been any concrete studies which indicate the relative possible damages and in what types of situations such damages occur, as against possible benefits, both for the normal child in the presence of the handicapped child and for the handicapped child, himself.

NUGENT: I will answer that in my report.

GOLDSMITH: I don't think there is any literature available in England. There has been very little work done on this topic. I am not competent, myself, to give you an answer, you know, to suggest whether there are good reasons perhaps for wholesale integration of handicapped children into ordinary schools or not.

C: I'm not suggesting wholesale integration. I am suggesting carefully planned introduction of each handicapped child.

GOLDSMITH: I think you will find in England that each individual is assessed on individual merit, and that each special authority usually employs an educational psychologist, whose job it is to establish whether, for instance, a child would be more suitably placed in a conventional or in a special school. If he has a handicapped child he wants to place in a special school, he would probably approach the Headmaster. The Headmaster may have unhealthy attitudes, and he may, quite well, for instance, excuse himself on the grounds that the school has architectural barriers. I don't think it is a valid excuse as a rule, but since the Headmaster has that point of view, I suggest that it is probably not a healthy environment for the disabled



child. It would be much better to find a suitable school where the Headmaster has a more reasonable and healthy attitude toward the disabled.

ABERCROMBIE: In discussing this sort of problem, one should think of the differences in a conventional school and a special one. I noticed that Goldsmith talked about inserting a child into a normal school. I would think that this could be a traumatic thing. But what we need is an attitude where insertion is not the word we would use.

GOLDSMITH: Yes. I think that was perhaps unfair.

OSMOND: One has to realize that the very strangest things A publisher friend of mine in New York is publishing an absolutely unique book, which to anyone I would strongly recommend, an autobiography about a Mongolian idiot whom I have This boy who has often been referred to in the book has, seen. in fact, demonstrated that he is by no means as supposed. has learned to type and he has written his own quite remarkable and extraordinary autobiography. So out comes this Lional Penrose, who is one of the great authorities on this topic, introducing and giving a note of hope. Although we must probably be realistic from time to time, these extraordinary things happen. There must be more effort and more publishers willing to publish books of this sort. Then we will get the point of view of the people themselves much more clearly. Bob Sommer and I have done a lot of work on the autobiographies of mentally ill people, which have been unbelievably useful in establishing the point



of view of these people themselves and in getting many of the changes for their environment that were necessary. This kind of book can very often be more eloquent than any series of observations that we make.

Q: Have you the title?

OSMOND: I think it is just going to be called Hydro Hunt's Book, which is the author's name. He is very pleased, and now he is working on a second book.

Society of Crippled Children called "Sound of the Trumpets," which deals with the problem of architectural barriers. It puts it almost on an entertainment level that has humor in it. And it is a film that you might be interested in viewing sometime, because it takes a different approach—more or less an entertainment approach to this whole problem of barriers for the handicapped. If you are interested in getting a copy or loan, you may write me in Chicago, if you desire to borrow a copy.

